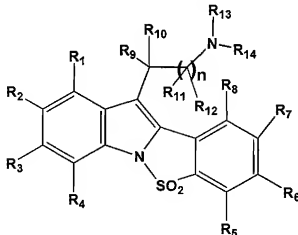


**AMENDMENTS TO THE CLAIMS**

The following listing of claims replaces all prior listings of claims presented in the application.

1. (Currently amended) A compound of the general formula (I),



**General Formula (I)**

~~its derivatives, its analogs, and~~ its tautomeric forms, its stereoisomers, ~~its polymorphs, and~~ its pharmaceutically acceptable salts and solvates,

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>, R<sub>11</sub> and R<sub>12</sub> may be same or different and each independently represent hydrogen, halogen, ~~exo-thio~~, perhaloalkyl, hydroxy, amino, nitro, cyano, formyl, amidino, guanidino, substituted or unsubstituted groups such as linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>2</sub>-C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, (C<sub>1</sub>-C<sub>12</sub>)alkoxy, cyclo(C<sub>3</sub>-C<sub>7</sub>)alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heterocyclylalkyl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, heterocyclylalkyloxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, arylamino, diarylamino, aralkylamino, alkoxy carbonyl, aryloxy carbonyl, aralkoxy carbonyl, heterocyclylalkoxy carbonyl, heteroaryloxy carbonyl, hydroxyalkyl, aminoalkyl, monoalkylaminoalkyl, dialkylaminoalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl,

alkoxycarbonylamino, aryloxy carbonylamino, aralkyloxy carbonylamino, aminocarbonylamino, alkylaminocarbonylamino, dialkylaminocarbonylamino, alkylamidino, alkylguanidino, dialkylguanidino, hydrazino, hydroxylamino, ~~carboxylic acid and its derivatives, sulfonic acids and its derivatives, phosphoric acid and its derivatives~~; or the adjacent groups like R<sub>1</sub> and R<sub>2</sub> or R<sub>2</sub> and R<sub>3</sub> or R<sub>3</sub> and R<sub>4</sub> or R<sub>5</sub> and R<sub>6</sub> and R<sub>7</sub> or R<sub>7</sub> and R<sub>8</sub> together with carbon atoms to which they are attached may form a 5, 6, or 7 membered ring, which may further optionally contain one or more double bonds and/or one or more heteroatoms such as the group "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; or R<sub>9</sub> and R<sub>10</sub> or R<sub>11</sub> and R<sub>12</sub> together represent double bond attached to "Oxygen" or "Sulfur"; or R<sub>9</sub> and R<sub>10</sub> or R<sub>11</sub> and R<sub>12</sub> together with the carbon atoms to which they are attached may form a 3, 4, 5, or 6 membered ring, which may further optionally contain one or more double bonds, and/or one or more heteroatoms such as the group "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and also includes combination of one or more double bonds with "heteroatoms", as above defined;

R<sub>13</sub> and R<sub>14</sub> may be same or different and each independently represents hydrogen, substituted or unsubstituted groups such as linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>2</sub>-C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>2</sub>-C<sub>12</sub>)alkanoyl (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, aryl, aralkyl, heteroaryl, or heterocyclalkyl; optionally or R<sub>13</sub> and R<sub>14</sub> along with the nitrogen atom, may form a 3, 4, 5, 6 or 7-membered heterocyclic ring, wherein the ring may be further substituted, and it may have either one, two or three double bonds or "additional heteroatoms", as defined above; and

"n" is an integer ranging from 1 to 8, preferably 1 to 4, and may represent ~~represents may be~~ either a linear or branched carbon chain.

2. (Currently amended) A compound according to Claim [[-]]1, which is selected from the group consisting of:

6-(2-N,N-Dimethylaminoethyl)benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

4-Bromo-6-(2-N,N-dimethylaminoethyl)benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

4-Chloro-6-(2-N,N-dimethylaminoethyl)-benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-N,N-Dimethylaminoethyl)-4-fluorobenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-N,N-Dimethylaminoethyl)-4-methylbenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-N,N-Dimethylaminoethyl)-4-methylbenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide  
hydrochloride salt;

6-(2-N,N-Dimethylaminoethyl)-4-methylbenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide maleate  
salt;

6-(2-N,N-Dimethylaminoethyl)-4-methylbenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide D,L-malic  
acid salt;

6-(2-N,N-Dimethylaminoethyl)-4-methylbenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide oxalate  
salt;

6-(2-N,N-Dimethylaminoethyl)-4-methylbenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide citrate salt;

6-(2-N,N-Dimethylaminoethyl)-4-methoxybenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-N,N-Dimethylaminoethyl)-8-methoxybenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

4-Bromo-6-(2-N,N-dimethylaminoethyl)-8-methoxybenzo[d]isothiazolo[3,2-a]indol-S,S-  
dioxide;

4-Chloro-6-(2-N,N-dimethylaminoethyl)-8-methoxybenzo[d]isothiazolo[3,2-a]indol-S,S-  
dioxide;

6-(2-N,N-Dimethylaminoethyl)-4-fluoro-8-methoxybenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-N,N-Dimethylaminoethyl)-4-methyl-8-methoxybenzo[d]isothiazolo[3,2-a]indol-S,S-  
dioxide;

6-(2-N,N-Dimethylaminoethyl)-4,8-dimethoxybenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-N,N-Dimethylaminoethyl)-2-ethylbenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

2-Chloro-6-(2-N,N-dimethylaminoethyl)benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

2,4-Dichloro-6-(2-N,N-dimethylaminoethyl)-benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

2,3-Dichloro-6-(2-N,N-dimethylaminoethyl)-benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

5-Chloro-6-(2-N,N-dimethylaminoethyl)-2-methylbenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

2,4,5-Trichloro-6-(2-N,N-dimethylaminoethyl)-benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-N,N-Dimethylaminoethyl)-2,4-difluorobenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-N,N-dimethylaminoethyl)-4-fluoro-8-methylbenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

2,4-Difluoro-6-(2-N,N-dimethylaminoethyl)-8-methylbenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-N,N-Dimethylaminoethyl)-2-methoxybenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-N,N-Dimethylaminoethyl)-2,8-dimethoxybenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-N,N-Dimethylaminoethyl)-8-methylbenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(3-N,N-Dimethylamino-1-hydroxyprop-1-yl)benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

4-Bromo-6-(3-N,N-Dimethylamino-1-hydroxyprop-1-yl)benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(3-N,N-Dimethylamino-1-hydroxyprop-1-yl)-8-methoxybenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(3-N,N-Dimethylamino-1-hydroxyprop-1-yl)-8-methylbenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

4-Bromo-6-(3-N,N-dimethylamino-1-hydroxyprop-1-yl)-8-methoxybenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-[2-(4-Methylpiperazin-1-yl)ethyl]benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-[2-Morpholin-4-ylethyl]benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-Pyrrolidin-1-ylethyl)benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-Piperidin-1-yl)ethyl]benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

4-Bromo-6-[2-morpholin-4-ylethyl]benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

4-Bromo-6-(2-pyrrolidin-1-ylethyl)benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

4-Bromo-6-[2-(4-methylpiperazin-1-yl)ethyl]benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(3-(Piperidin-1-yl)-1-hydroxyprop-1-yl)benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(3-(Piperidin-1-yl)-1-hydroxyprop-1-yl)-8-methoxybenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

4-Bromo-6-(3-(piperidin-1-yl)-1-hydroxyprop-1-yl)benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

4-Bromo-6-(3-(piperidin-1-yl)-1-hydroxyprop-1-yl)-8-methoxybenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(3-(Pyrrolidin-1-yl)-1-hydroxyprop-1-yl)benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(3-(Pyrrolidin-1-yl)-1-hydroxyprop-1-yl)-8-methoxybenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-(N,N-Diethylamino)-2-methylethyl)benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

6-(2-(N,N-Dimethylamino-1-hydroxy-1-yl)benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide;

4-Bromo-6-(2-(N,N-Dimethylamino-1-hydroxy-1-yl)benzo[d]isothiazol[3,2-a]indol-S,S-dioxide;

6-(2-(N,N-Dimethylaminoethyl)-2,4-difluoro-8-Methoxybenzo[d]isothiazolo[3,2-a]indol-5-ylidene)-2,2,2-trifluoroethylmethanesulfonyl fluoride;  
dioxide;

6-(2-(N,N-Dimethylamino-2-methylethyl)benzo[d]isothiazolo[3,2-a]indol-S,S-dioxide:

**4-Chloro-6-(2-(N,N-Dimethylaminoethyl)-8-methylbenzo[d]isothiazolo[3,2-a]indol-S,S-dioxide:**

and

8-(2-(N,N-Dimethylaminoethyl)benzo[d]isothiazolo[3,2-a]benzo(g)indol-S,S-dioxide,<sub>3</sub> and

or its stereoisomers, its N-oxides, and its polymorphs, its pharmaceutically acceptable salts and solvates.

3. (Currently amended) A pharmaceutical composition comprising either of a pharmaceutically acceptable carrier, diluent/s, excipient/s or solvates along with a therapeutically effective amount of a compound according to Claim\_[-]1, ~~its derivatives, its analogs,~~ its tautomeric forms, its stereoisomers, its geometric forms, its N-oxides, and its polymorphs, its pharmaceutically acceptable salts, or solvates.
4. (Currently amended) A pharmaceutical composition according to Claim\_[-]3, in the form of a tablet, capsule, powder, lozenges, suppositories, syrup, solution, suspension or injectable, administered in, as a single dose or multiple dose units.
5. (Withdrawn-currently amended) Use of compound of ~~general~~ formula (I), as defined in Claim\_[-]1 or a pharmaceutical composition as defined in Claim\_[-]3 for preparing medicaments.

6. (Withdrawn-currently amended) Use of compound of general formula (I), as defined in Claim\_[-]1 or a pharmaceutical composition as defined in Claim\_[-]3 for the treatment where a modulation of 5-HT activity is desired.
7. (Withdrawn-currently amended) Use of a compound as claimed in Claim\_[-]1 for the manufacture of a medicament for the treatment and/or prevention of clinical conditions for which a selective action on 5-HT receptors is indicated.
8. (Withdrawn-currently amended) Use of a compound as claimed in Claim\_[-]1 for the treatment and/or prevention of clinical conditions such as anxiety, depression, convulsive disorders, obsessive-compulsive disorders, migraine headache, cognitive memory disorders, ADHD (Attention Deficient Disorder/ Hyperactivity Syndrome), personality disorders, psychosis, paraphrenia, psychotic depression, mania, schizophrenia, schizophreniform disorders, withdrawal from drug abuse, panic attacks, sleep disorders and also disorders associated with spinal trauma and /or head injury.
9. (Withdrawn-currently amended) Use of a compound as claimed in Claim\_[-]1 for the treatment of mild cognitive impairment and other neurodegenerative disorders like Alzheimer's disease, Parkinsonism and Huntington's chorea.
10. (Withdrawn-currently amended) Use of a compound as claimed in Claim\_[-]1 for the treatment of certain GI (Gastrointestinal) disorders such as IBS (Irritable bowel syndrome) or chemotherapy induced emesis.
11. (Withdrawn-currently amended) Use of a compound as claimed in Claim\_[-]1 to reduce morbidity and mortality associated with the excess weight.

12. (Withdrawn-currently amended) Use of a radiolabelled compound as claimed in Claim\_[-]1, as a diagnostic tool for modulating 5-HT receptor function.
13. (Withdrawn-currently amended) Use of a compound as claimed in Claim[[s] 1 in combination with a 5-HT re-uptake inhibitor, and / or a pharmaceutically acceptable salt thereof.
14. (Canceled)
15. (Withdrawn-currently amended) A method for the treatment and/or prophylaxis of clinical conditions such as anxiety, convulsive disorders, obsessive-compulsive disorders, migraine headache, cognitive memory disorders, ADHD (Attention Deficient Disorder/ Hyperactivity Syndrome), personality disorders, psychosis, paraphrenia, psychotic depression, mania, schizophrenia, schizophreniform disorders, withdrawal from drug abuse, panic attacks, sleep disorders and also disorders associated with spinal trauma and /or head injury which comprises administering to a patient in need thereof, an effective amount of a compound of general formula (I) as claimed in Claim\_[-]1.
16. (Withdrawn-currently amended) A method for the treatment and/or prophylaxis of mild cognitive impairment and other neurodegenerative disorders like Alzheimer's disease, Parkinsonism and Huntington's chorea which comprises administering to a patient in need thereof, an effective amount of a compound of general formula (I) as claimed in Claim\_[-]1.



17. (Withdrawn-currently amended) A method for the treatment of certain GI (Gastrointestinal) disorders such as IBS (Irritable bowel syndrome) or chemotherapy induced emesis using a compound of general formula (I) as claimed in Claim\_1[1].

18. (Withdrawn-currently amended) A method to reduce morbidity and mortality associated with the excess weight using a compound of general formula (I) as claimed in Claim\_1[1].

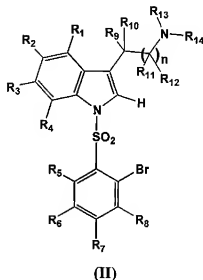
19. (Withdrawn-currently amended) A process for the preparation of a compound of general formula (I),

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>, R<sub>11</sub> and R<sub>12</sub> may be same or different and each independently represent hydrogen, halogen, ~~oxo~~, ~~thio~~, perhaloalkyl, hydroxy, amino, nitro, cyano, formyl, amidino, guanidino, substituted or unsubstituted groups such as linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>2</sub>-C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, (C<sub>1</sub>-C<sub>12</sub>)alkoxy, cyclo(C<sub>3</sub>-C<sub>7</sub>)alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heterocyclylalkyl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, heterocyclylalkyloxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, arylamino, diarylamino, aralkylamino, alkoxy, carbonyl, aryloxy, carbonyl, aralkoxy, carbonyl, heterocyclylalkoxy, carbonyl, heteroaryloxy, carbonyl, hydroxyalkyl, aminoalkyl, monoalkylaminoalkyl, dialkylaminoalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxy, carbonyl, amino, aryloxy, carbonyl, amino, aralkoxy, carbonyl, amino, aminocarbonyl, amino, alkylaminocarbonyl, amino, dialkylaminocarbonyl, amino, alkylamidino, alkylguanidino, dialkylguanidino, hydrazino, hydroxylamino, ~~carboxylic acid and its derivatives, sulfonic acids and its derivatives, phosphoric acid and its derivatives~~; or the adjacent groups like R<sub>1</sub> and R<sub>2</sub> or R<sub>2</sub> and R<sub>3</sub> or R<sub>3</sub> and R<sub>4</sub> or R<sub>5</sub> and R<sub>6</sub> or R<sub>6</sub> and R<sub>7</sub> or R<sub>7</sub> and R<sub>8</sub> together with carbon atoms to which they are attached may form a 5, 6, or 7 membered ring, which may further optionally contain one or more double bonds and/or one or more heteroatoms such as the group "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; or R<sub>9</sub> and R<sub>10</sub> or R<sub>11</sub> and R<sub>12</sub> together represent double bond attached to "Oxygen" or "Sulfur"; or R<sub>9</sub> and R<sub>10</sub> or R<sub>11</sub> and R<sub>12</sub> together with the

carbon atoms to which they are attached may form a 3, 4, 5, or 6 membered ring, which may further optionally contain one or more double bonds, and/or one or more heteroatoms such as the group "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and also includes combination of one or more double bonds with "heteroatoms", as above defined;

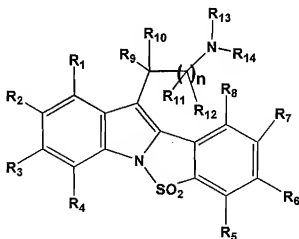
R<sub>13</sub> and R<sub>14</sub> may be same or different and each independently represents hydrogen, substituted or unsubstituted groups such as linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>2</sub>-C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>2</sub>-C<sub>12</sub>)alkanoyl (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, aryl, aralkyl, heteroaryl, or heterocyclylalkyl; optionally or R<sub>13</sub> and R<sub>14</sub> along with the nitrogen atom, may form a 3, 4, 5, 6 or 7-membered heterocyclic ring, wherein the ring may be further substituted, and it may have either one, two or three double bonds or "additional heteroatoms", as defined above; and

"n" is an integer ranging from 1 to 8, preferably 1 to 4, and may represent ~~represents may be~~ either a linear or branched carbon chain; which comprises of cyclizing, a compound of formula (II) given below,



wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>, R<sub>11</sub>, R<sub>12</sub>, R<sub>13</sub>, R<sub>14</sub> and "n", wherein all the symbols are as defined above, using a Pd(0) or Pd (II) derivative as a catalyst.

20. (Withdrawn-currently amended) A process for the preparation of a compound of general formula (I),

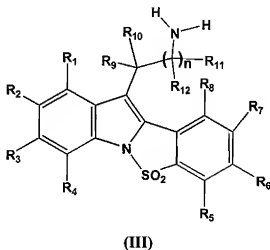


(I)

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>, R<sub>11</sub> and R<sub>12</sub> may be same or different and each independently represent hydrogen, halogen, ~~oxy-~~thio, perhaloalkyl, hydroxy, amino, nitro, cyano, formyl, amidino, guanidino, substituted or unsubstituted groups such as linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>2</sub>-C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, (C<sub>1</sub>-C<sub>12</sub>)alkoxy, cyclo(C<sub>3</sub>-C<sub>7</sub>)alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heterocyclylalkyl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, heterocyclylalkoxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, arylamino, diarylamino, aralkylamino, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, heterocyclylalkoxycarbonyl, heteroaryloxycarbonyl, hydroxyalkyl, aminoalkyl, monoalkylaminoalkyl, dialkylaminoalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxy carbonylamino, aralkoxy carbonylamino, aminocarbonylamino, alkylaminocarbonylamino, dialkylaminocarbonylamino, alkylamidino, alkylguanidino, dialkylguanidino, hydrazino, hydroxylamino, ~~carboxylic acid and its derivatives, sulfonic acids and its derivatives, phosphoric acid and its derivatives~~; or the adjacent groups like R<sub>1</sub> and R<sub>2</sub> or R<sub>2</sub> and R<sub>3</sub> or R<sub>3</sub> and R<sub>4</sub> or R<sub>5</sub> and

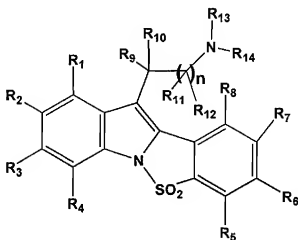
R<sub>6</sub> or R<sub>6</sub> and R<sub>7</sub> or R<sub>7</sub> and R<sub>8</sub> together with carbon atoms to which they are attached may form a 5, 6, or 7 membered ring, which may further optionally contain one or more double bonds and/or one or more heteroatoms such as the group "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; or R<sub>9</sub> and R<sub>10</sub> or R<sub>11</sub> and R<sub>12</sub> together represent double bond attached to "Oxygen" or "Sulfur"; or R<sub>9</sub> and R<sub>10</sub> or R<sub>11</sub> and R<sub>12</sub> together with the carbon atoms to which they are attached may form a 3, 4, 5, or 6 membered ring, which may further optionally contain one or more double bonds, and/or one or more heteroatoms such as the group "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and also includes combination of one or more double bonds with "heteroatoms", as above defined;

R<sub>13</sub> and R<sub>14</sub> may be same or different and each independently represents hydrogen, substituted or unsubstituted groups such as linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>2</sub>-C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>2</sub>-C<sub>12</sub>)alkanoyl (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, aryl, aralkyl, heteroaryl, or heterocyclalkyl; ~~optionally or~~ R<sub>13</sub> and R<sub>14</sub> along with the nitrogen atom, may form a 3, 4, 5, 6 or 7-membered heterocyclic ring, wherein the ring may be further substituted, and it may have either one, two or three double bonds or "additional heteroatoms", as defined above; and "n" is an integer ranging from 1 to 8, preferably 1 to 4, and may represent ~~represents may be~~ either a linear or branched carbon chain; which comprises of reacting a compound (III) given below,



wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>, R<sub>11</sub>, R<sub>12</sub> and "n" are as defined above, with a suitable alkylating agent such as R<sub>13</sub>X or R<sub>14</sub>X or XR<sub>13</sub>R<sub>14</sub>X in successive steps or in one step, wherein X is good leaving group such as halogen and hydroxyl.

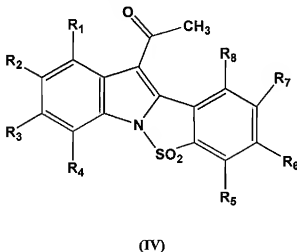
21. (Withdrawn-currently amended) A process for the preparation of a compound of general formula (I),



wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>, R<sub>11</sub> and R<sub>12</sub> may be same or different and each independently represent hydrogen, halogen, ~~oxy~~<sup>thio</sup>, perhaloalkyl, hydroxy, amino, nitro, cyano, formyl, amidino, guanidino, substituted or unsubstituted groups such as linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>2</sub>-C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, (C<sub>1</sub>-C<sub>12</sub>)alkoxy, cyclo(C<sub>3</sub>-C<sub>7</sub>)alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heterocyclylalkyl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, heterocyclylalkyloxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, arylamino, diarylamino, aralkylamino, alkoxycarbonyl, aryloxy carbonyl, aralkoxy carbonyl, heterocyclylalkoxy carbonyl, heteroaryloxy carbonyl, hydroxyalkyl, aminoalkyl, monoalkylaminoalkyl, dialkylaminoalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxy carbonylamino, aralkoxy carbonylamino, aminocarbonylamino, alkylaminocarbonylamino, dialkylaminocarbonylamino, alkylamidino, alkylguanidino, dialkylguanidino, hydrazino,

hydroxylamino, ~~carboxylic acid and its derivatives, sulfonic acids and its derivatives, phosphoric acid and its derivatives~~; or the adjacent groups like R<sub>1</sub> and R<sub>2</sub> or R<sub>2</sub> and R<sub>3</sub> or R<sub>3</sub> and R<sub>4</sub> or R<sub>5</sub> and R<sub>6</sub> or R<sub>6</sub> and R<sub>7</sub> or R<sub>7</sub> and R<sub>8</sub> together with carbon atoms to which they are attached may form a 5, 6, or 7 membered ring, which may further optionally contain one or more double bonds and/or one or more heteroatoms such as the group "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; or R<sub>9</sub> and R<sub>10</sub> or R<sub>11</sub> and R<sub>12</sub> together represent double bond attached to "Oxygen" or "Sulfur"; or R<sub>9</sub> and R<sub>10</sub> or R<sub>11</sub> and R<sub>12</sub> together with the carbon atoms to which they are attached may form a 3, 4, 5, or 6 membered ring, which may further optionally contain one or more double bonds, and/or one or more heteroatoms such as the group "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and also includes combination of one or more double bonds with "heteroatoms", as above defined;

R<sub>13</sub> and R<sub>14</sub> may be same or different and each independently represents hydrogen, substituted or unsubstituted groups such as linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>2</sub>-C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>2</sub>-C<sub>12</sub>)alkanoyl (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, aryl, aralkyl, heteroaryl, or heterocyclylalkyl; ~~optionally or~~ R<sub>13</sub> and R<sub>14</sub> along with the nitrogen atom, may form a 3, 4, 5, 6 or 7-membered heterocyclic ring, wherein the ring may be further substituted, and it may have either one, two or three double bonds or "additional heteroatoms", as defined above; and "n" is an integer ranging from 1 to 8, preferably 1 to 4, and ~~may represent represents may be~~ either a linear or branched carbon chain; which comprises of reacting a compound of (IV) given below,



wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> are as defined above, with formaldehyde and a compound of formula (V) given below,



wherein R<sub>13</sub> and R<sub>14</sub> are as defined above.

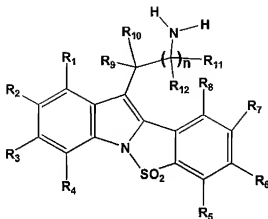
22. (Withdrawn) A process for the preparation of compound of formula (I), which comprises of either chemically or catalytically reducing compounds containing =C(O) group/s in the side chain, to the corresponding -C(OH,H) or -C(H,H) compound.

23. (Withdrawn-currently amended) A process according to Claim\_[-]19 to Claim\_[-]22, comprising of carrying out one or more of the following optional steps: i) removing any protecting group; ii) resolving the racemic mixture into pure enantiomers by the known methods and iii) preparing a pharmaceutically acceptable salt of a compound of formula (I) and/or iv preparing a pharmaceutically acceptable prodrug thereof.

24. (Canceled)

25. (Canceled)

26. (Currently amended) Novel intermediates of ~~general~~ formula (III) are represented as given below,



(III)

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>, R<sub>11</sub> and R<sub>12</sub> may be same or different and each independently represent hydrogen, halogen, ~~oxy-~~~~thio-~~ perhaloalkyl, hydroxy, amino, nitro, cyano, formyl, amidino, guanidino, substituted or unsubstituted groups such as linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>2</sub>-C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, (C<sub>1</sub>-C<sub>12</sub>)alkoxy, cyclo(C<sub>3</sub>-C<sub>7</sub>)alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heterocyclalkyl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, heterocyclalkyloxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, arylamino, diarylamino, aralkylamino, alkoxycarbonyl, aryloxy carbonyl, aralkoxycarbonyl, heterocyclalkoxycarbonyl, heteroaryloxy carbonyl, hydroxyalkyl, aminoalkyl, monoalkylaminoalkyl, dialkylaminoalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxy carbonylamino, aralkoxy carbonylamino, aminocarbonylamino, alkylaminocarbonylamino, dialkylaminocarbonylamino, alkylamidino, alkylguanidino, dialkylguanidino, hydrazino, hydroxylamino, ~~carboxylic acid and its derivatives, sulfonic acids and its derivatives, phosphoric acid and its derivatives~~; or the adjacent groups like R<sub>1</sub> and R<sub>2</sub> or R<sub>2</sub> and R<sub>3</sub> or R<sub>3</sub> and R<sub>4</sub> or R<sub>5</sub> and R<sub>6</sub> or R<sub>6</sub> and R<sub>7</sub> or R<sub>7</sub> and R<sub>8</sub> together with carbon atoms to which they are attached may form a 5, 6, or 7 membered ring, which may further optionally contain one or more double bonds and/or one or more heteroatoms such as the group "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; or R<sub>9</sub> and R<sub>10</sub> or R<sub>11</sub> and R<sub>12</sub> together represent double bond attached to "Oxygen" or "Sulfur"; or R<sub>9</sub> and R<sub>10</sub> or R<sub>11</sub> and R<sub>12</sub> together with the carbon atoms to which they are attached may form a 3, 4, 5, or 6 membered ring, which may further optionally contain one or more double bonds, and/or one or more heteroatoms such

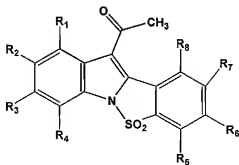


as the group "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and also includes combination of one or more double bonds with "heteroatoms", as above defined.

"n" is an integer ranging from 1 to 8. It is preferred that n be 1 to 4. The carbon chains which "n" represents may be either linear or branched.

27. (Withdrawn) A process provided for the preparation of novel intermediate of the general formula (III) which comprises of cyclizing a suitable compounds of formula (II).

28. (Withdrawn-currently amended) Novel intermediates defined of ~~general~~ formula (IV),

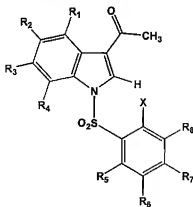


(IV)

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> are as may be same or different and each independently represent hydrogen, halogen, oxo-, thio-, perhaloalkyl, hydroxy, amino, nitro, cyano, formyl, amidino, guanidino, substituted or unsubstituted groups such as linear or branched (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>2</sub>-C<sub>12</sub>)alkenyl, (C<sub>2</sub>-C<sub>12</sub>)alkynyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkenyl, bicycloalkyl, bicycloalkenyl, (C<sub>1</sub>-C<sub>12</sub>)alkoxy, cyclo(C<sub>3</sub>-C<sub>7</sub>)alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heterocyclalkyl, heteroalkyl, heteroaryloxy, heteroaralkoxy, heterocyclalkyloxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, arylamino, diarylamino, aralkylamino, alkoxycarbonyl, aryloxy carbonyl, aralkoxy carbonyl,

heterocyclylalkoxycarbonyl, heteroaryloxycarbonyl, hydroxyalkyl, aminoalkyl, monoalkylaminoalkyl, dialkylaminoalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkyloxycarbonylamino, aminocarbonylamino, alkylaminocarbonylamino, dialkylaminocarbonylamino, alkylamidino, alkylguanidino, dialkylguanidino, hydrazino, hydroxylamino, ~~carboxylic acid and its derivatives, sulfonic acids and its derivatives, phosphoric acid and its derivatives;~~ or the adjacent groups like R<sub>1</sub> and R<sub>2</sub> or R<sub>2</sub> and R<sub>3</sub> or R<sub>3</sub> and R<sub>4</sub> or R<sub>5</sub> and R<sub>6</sub> or R<sub>6</sub> and R<sub>7</sub> or R<sub>7</sub> and R<sub>8</sub> together with carbon atoms to which they are attached may form a 5, 6, or 7 membered ring, which may further optionally contain one or more double bonds and/or one or more heteroatoms such as the group "Oxygen", "Nitrogen", "Sulfur" or "Selenium" and combinations of double bond and heteroatoms; and R<sub>9</sub> and R<sub>10</sub> here are represented as double bond attached to "Oxygen".

29. (Withdrawn-currently amended) A process provided for the preparation of novel intermediate of the general formula (IV) which comprises of cyclizing compounds of formula (VIII)



wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> are as defined above; using a Pd(0) or Pd (II) derivative as a catalyst.